(A) The owner or operator shall submit to the Administrator for approval a compliance schedule and a justification for the schedule.

(B) The Administrator shall approve the compliance schedule or request changes within 120 operating days of receipt of the compliance schedule and justification.

(c) The provisions of this section do not apply to each affected source producing PET using a continuous TPA high viscosity multiple end finisher process.

[61 FR 48229, Sept. 12, 1996, as amended at 62 FR 37722, July 15, 1997]

§ 63.1332 Emissions averaging provisions.

(a) This section applies to owners or operators of existing affected sources who seek to comply with § 63.1313(b) by using emissions averaging rather than following the provisions of §§ 63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330.

(1) The following emission point limitations apply to the use of these provisions:

(i) All emission points included in an emissions average shall be from the same affected source. There may be an emissions average for each affected source located at a plant site.

(ii)(A) If a plant site has only one affected source for which emissions averaging is being used to demonstrate compliance, the number of emission points allowed in the emissions average for said affected source is limited to twenty. This number may be increased by up to five additional emission points if pollution prevention measures are used to control five or more of the emission points included in the emissions average.

(B) If a plant site has two or more affected sources for which emissions averaging is being used to demonstrate compliance, the number of emission points allowed in the emissions averages for said affected sources is limited to twenty. This number may be increased by up to five additional emission points if pollution prevention measures are used to control five or more of the emission points included in the emissions averages.

(2) Compliance with the provisions of this section can be based on either organic HAP or TOC.

(3) For the purposes of these provisions, whenever Method 18, 40 CFR part 60, appendix A is specified within the paragraphs of this section or is specified by reference through provisions outside this section, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (a)(3)(i) and (a)(3)(ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(b) Unless an operating permit application has been submitted, the owner or operator shall develop and submit for approval an Emissions Averaging Plan containing all of the information required in § 63.1335(e)(4) for all emission points to be included in an emissions average.

(c) Paragraphs (c)(1) through (c)(5) of this section describe the emission points that can be used to generate emissions averaging credits if control was applied after November 15, 1990, and if sufficient information is available to determine the appropriate value of credits for the emission point. Paragraph (c)(6) of this section discusses the use of pollution prevention in generating emissions averaging credits.

(1) Storage vessels, batch process vents, aggregate batch vent streams, continuous process vents subject to § 63.1315, and process wastewater streams that are determined to be Group 2 emission points. The term ''continuous process vents subject to § 63.1315'' includes continuous process vents subject to § 63.1316 (b)(1)(iii), (b)(2)(iii), and (c)(2), which reference § 63.1315.

(2) Continuous process vents located in the collection of material recovery sections within the affected source at an existing affected source producing PET using a continuous dimethyl terephthalate process subject to §63.1316(b)(1)(i) where the uncontrolled organic HAP emissions from said continuous process vents are equal to or less than 0.12 kg organic HAP per Mg of product. These continuous process vents shall be considered Group 2 emission points for the purposes of this section.

(3) Storage vessels, continuous process vents subject to §63.1315, and process wastewater streams that are determined to be Group 1 emission points and that are controlled by a technology that the Administrator or permitting authority agrees has a higher nominal efficiency than the reference control technology. Information on the nominal efficiencies for such technologies must be submitted and approved as provided in paragraph (i) of this section.

(4) Batch process vents and aggregate batch vent streams that are determined to be Group 1 emission points and that are controlled to a level more stringent than the applicable standard.

(5) Continuous process vents subject to §63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections within the affected source, as specified in paragraphs (c)(5)(i) through (c)(5)(ii) of this section. The continuous process vents identified in paragraphs (c)(5)(i) through (c)(5)(ii) of this section shall be considered to be Group 1 emission points for the purposes of this section.

(i) Continuous process vents subject to §63.1316(b)(1)(i) located in the collection of material recovery sections within the affected source where the uncontrolled organic HAP emissions for said continuous process vents are greater than 0.12 kg organic HAP per Mg of product and said continuous process vents are controlled to a level more stringent than the applicable standard.

(ii) Continuous process vents subject to §63.1316(b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections within the affected source where the uncontrolled organic HAP emissions from said continuous process vents are controlled to a level more stringent than the applicable standard.

(6) The percent reduction for any storage vessel, batch process vent, aggregate batch vent stream, continuous process vent, and process wastewater stream from which emissions are reduced by pollution prevention measures shall be determined using the procedures specified in paragraph (j) of this section.

(i) For a Group 1 storage vessel, batch process vent, aggregate batch vent stream, continuous process vent, or process wastewater stream, the pollution prevention measure must reduce emissions more than if the applicable reference control technology or standard had been applied to the emission point instead of the pollution prevention measure, except as provided in paragraph (c)(6)(ii) of this section.

(ii) If a pollution prevention measure is used in conjunction with other controls for a Group 1 storage vessel, batch process vent, aggregate batch vent stream, continuous process vent, or process wastewater stream, the pollution prevention measure alone does not have to reduce emissions more than the applicable reference control technology or standard, but the combination of the pollution prevention measure and other controls must reduce emissions more than if the applicable reference control technology or standard had been applied instead of the pollution prevention measure.

(d) The following emission points cannot be used to generate emissions averaging credits:

(1) Emission points already controlled on or before November 15, 1990, cannot be used to generate credits unless the level of control is increased after November 15, 1990. In this case, credit will be allowed only for the increase in control after November 15, 1990.

(2) Group 1 emission points, identified in paragraph (c)(3) of this section, that are controlled by a reference control technology cannot be used to generate credits unless the reference control technology has been approved for use in a different manner and a higher nominal efficiency has been assigned

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according to the procedures in paragraph (i) of this section.

(3) Emission points for nonoperating TPPU cannot be used to generate credits. TPPU that are shutdown cannot be used to generate credits or debits.

(4) Maintenance wastewater cannot be used to generate credits. Wastewater streams treated in biological treatment units cannot be used to generate credits. These two types of wastewater cannot be used to generate credits or debits. For the purposes of this section, the terms wastewater and wastewater stream are used to mean process wastewater.

(5) Emission points controlled to comply with a State or Federal rule other than this subpart cannot be used to generate credits, unless the level of control has been increased after November 15, 1990, to a level above what is required by the other State or Federal rule. Only the control above what is required by the other State or Federal rule will be credited. However, if an emission point has been used to generate emissions averaging credit in an approved emissions average, and the emission point is subsequently made subject to a State or Federal rule other than this subpart, the emission point can continue to generate emissions averaging credit for the purpose of complying with the previously approved emissions average.

(e) For all emission points included in an emissions average, the owner or operator shall perform the following tasks:

(1) Calculate and record monthly debits for all Group 1 emission points that are controlled to a level less stringent than the reference control technology or standard for those emission points. Said Group 1 emission points are identified in paragraphs (c)(3) through (c)(5) of this section. Equations in paragraph (g) of this section shall be used to calculate debits.

(2) Calculate and record monthly credits for all Group 1 and Group 2 emission points that are over-controlled to compensate for the debits. Equations in paragraph (h) of this section shall be used to calculate credits. Emission points and controls that meet the criteria of paragraph (c) of this section may be included in the credit calculation, whereas those described in paragraph (d) of this section shall not be included.

(3) Demonstrate that annual credits calculated according to paragraph (h) of this section are greater than or equal to debits calculated for the same annual compliance period according to paragraph (g) of this section.

(i) The owner or operator may choose to include more than the required number of credit-generating emission points in an emissions average in order to increase the likelihood of being in compliance.

(ii) The initial demonstration in the Emissions Averaging Plan or operating permit application that credit-generating emission points will be capable of generating sufficient credits to offset the debits from the debit-generating emission points must be made under representative operating conditions. After the compliance date, actual operating data will be used for all debit and credit calculations.

(4) Demonstrate that debits calculated for a quarterly (3-month) period according to paragraph (g) of this section are not more than 1.30 times the credits for the same period calculated according to paragraph (h) of this section. Compliance for the quarter shall be determined based on the ratio of credits and debits from that quarter, with 30 percent more debits than credits allowed on a quarterly basis.

(5) Record and report quarterly and annual credits and debits in the Periodic Reports as specified in § 63.1335(e)(6). Every fourth Periodic Report shall include a certification of compliance with the emissions averaging provisions as required by § 63.1335(e)(6)(vi)(D)(2).

(f) Debits and credits shall be calculated in accordance with the methods and procedures specified in paragraphs (g) and (h) of this section, respectively, and shall not include emissions during the following periods:

(1) Emissions during periods of start-up, shutdown, and malfunction, as described in the Start-up, Shutdown, and Malfunction Plan.

(2) Emissions during periods of monitoring excursions, as defined in

§63.1334(d). For these periods, the calculation of monthly credits and debits shall be adjusted as specified in paragraphs (f)(2)(i) through (f)(2)(iii) of this section.

(i) No credits would be assigned to the credit-generating emission point.

(ii) Maximum debits would be assigned to the debit-generating emission point.

(iii) The owner or operator may demonstrate to the Administrator that full or partial credits or debits should be assigned using the procedures in paragraph (l) of this section.

(g) Debits are generated by the difference between the actual emissions from a Group 1 emission point that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology or standard and the emissions allowed for the Group 1 emission point. Said Group 1 emission points are identified in paragraphs (c)(3) through (c)(5) of this section. Debits shall be calculated as follows:

(1) Source-wide debits shall be calculated using Equation 28 of this subpart. Debits and all terms of Equation 28 of this subpart are in units of megagrams per month.

$$
\begin{aligned}
\text{Debits} = &\sum_{i=1}^{n}\left(\text{ECPV}_{i\text{ACTUAL}} - (0.02)\text{ECPV}_{iu}\right) \\
&+ \sum_{j=1}^{n}\left(\text{ECPVS}_{j\text{ACTUAL}} - \text{ECPVS}_{j\text{STD}}\right) + \sum_{i=1}^{n}\left(\text{ES}_{i\text{ACTUAL}} - (b)\text{ES}_{iu}\right) \\
&+ \sum_{i=1}^{n}\left(\text{EWW}_{i\text{ACTUAL}} - \text{EWW}_{ic}\right) + \sum_{i=1}^{n}\left(\text{EBPV}_{i\text{ACTUAL}} - (0.10)\text{EBPV}_{iu}\right) \qquad [\text{Eq. 28}] \\
&+ \sum_{i=1}^{n}\left(\text{EABV}_{i\text{ACTUAL}} - (0.10)\text{EABV}_{iu}\right)
\end{aligned}
$$

where:

$\text{ECPV}_{i\text{ACTUAL}}$=Emissions from each Group 1 continuous process vent i subject to §63.1315 that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology. $\text{ECPV}_{i\text{ACTUAL}}$ is calculated according to paragraph (g)(2) of this section.

$(0.02)\text{ECPV}_{iu}$=Emissions from each Group 1 continuous process vent i subject to §63.1315 if the applicable reference control technology had been applied to the uncontrolled emissions. ECPV_{iu} is calculated according to paragraph (g)(2) of this section.

$\text{ECPVS}_{j\text{ACTUAL}}$=Emissions from Group 1 continuous process vents subject to §63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source that are uncontrolled or controlled to a level less stringent than the applicable standard. $\text{ECPVS}_{j\text{ACTUAL}}$ is calculated according to paragraph (g)(3) of this section.

$\text{ECPVS}_{j\text{STD}}$=Emissions from Group 1 continuous process vents subject to §63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source if the applicable standard had been applied to the uncontrolled emissions. $\text{ECPVS}_{j\text{STD}}$ is calculated according to paragraph (g)(3) of this section.

$\text{ES}_{i\text{ACTUAL}}$=Emissions from each Group 1 storage vessel i that is uncontrolled or is controlled to a level

less stringent than the applicable reference control technology or standard. $ES_{iACTUAL}$ is calculated according to paragraph (g)(4) of this section.

(BL)ES_{iu}=Emissions from each Group 1 storage vessel i if the applicable reference control technology or standard had been applied to the uncontrolled emissions. ES_{iu} is calculated according to paragraph (g)(4) of this section. For calculating emissions, BL=0.05 for each Group 1 storage vessel i subject to § 63.1314(a); and BL=0.02 for each storage vessel i subject to § 63.1314(c).

$EWW_{iACTUAL}$=Emissions from each Group 1 wastewater stream i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology. $EWW_{iACTUAL}$ is calculated according to paragraph (g)(5) of this section.

EWW_{ic}=Emissions from each Group 1 wastewater stream i if the reference control technology had been applied to the uncontrolled emissions. EWW_{ic} is calculated according to paragraph (g)(5) of this section.

$EBPV_{iACTUAL}$=Emissions from each Group 1 batch process vent i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology. $EBPVi_{iACTUAL}$ is calculated according to paragraph (g)(6) of this section.

(0.10)$EBPV_{iu}$=Emissions from each Group 1 batch process vent i if the applicable reference control technology had been applied to the uncontrolled emissions. $EBPV_{iu}$ is calculated according to paragraph (g)(6) of this section.

$EABV_{iACTUAL}$=Emissions from each Group 1 aggregate batch vent stream i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology. $EBPVi_{iACTUAL}$ is calculated according to paragraph (g)(7) of this section.

(0.10)$EABV_{iu}$=Emissions from each Group 1 aggregate batch vent stream i if the applicable reference control technology had been applied to the uncontrolled emissions. $EBPV_{iu}$ is calculated according to paragraph (g)(7) of this section.

n=The number of emission points being included in the emissions average.

(2) Emissions from continuous process vents subject to § 63.1315 shall be calculated as follows:

(i) For purposes of determining continuous process vent stream flow rate, organic HAP concentrations, and temperature, the sampling site shall be after the final product recovery device, if any recovery devices are present; before any control device (for continuous process vents, recovery devices shall not be considered control devices); and before discharge to the atmosphere. Method 1 or 1A, 40 CFR part 60, appendix A, shall be used for selection of the sampling site.

(ii) $ECPV_{iu}$ for each continuous process vent i shall be calculated using Equation 29 of this subpart.

$$ECPV_{iu} = \left(2.494 \times 10^{-9}\right) Qh \left(\sum_{j=1}^{n} C_j M_j\right) \qquad [Eq.\ 29]$$

where:

$ECPV_{iu}$=Uncontrolled continuous process vent emission rate from continuous process vent i, megagrams per month.

Q=Vent stream flow rate, dry standard cubic meters per minute, measured using Method 2, 2A, 2C, or 2D, 40 CFR part 60, appendix A, as appropriate.

h=Monthly hours of operation during which positive flow is present in the continuous process vent, hours per month.

Cj=Concentration, parts per million by volume, dry basis, of organic HAP j

as measured by Method 18, 40 CFR part 60, appendix A.

Mj=Molecular weight of organic HAP j, gram per gram-mole.

n=Number of organic HAP in stream.

(A) The values of Q and Cj shall be determined during a performance test conducted under representative operating conditions. The values of Q and Cj shall be established in the Notification of Compliance Status and must be updated as provided in paragraph (g)(2)(ii)(B) of this section.

(B) If there is a change in capacity utilization other than a change in monthly operating hours, or if any other change is made to the process or product recovery equipment or operation such that the previously measured values of Q and Cj are no longer representative, a new performance test shall be conducted to determine new representative values of Q and Cj. These new values shall be used to calculate debits and credits from the time of the change forward, and the new values shall be reported in the next Periodic Report.

(iii) The following procedures and equations shall be used to calculate ECPV$_{iACTUAL}$:

(A) If the continuous process vent is not controlled by a control device or pollution prevention measure, ECPV$_{iACTUAL}$=ECPV$_{iu}$, where ECPV$_{iu}$ is calculated according to the procedures in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(B) If the continuous process vent is controlled using a control device or a pollution prevention measure achieving less than 98 percent reduction, calculate ECPV$_{iACTUAL}$ using Equation 30 of this subpart.

$$\text{ECPV}_{\text{iACTUAL}} = \text{ECPV}_{\text{iu}}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. 30}]$$

(*1*) The percent reduction shall be measured according to the procedures in §63.116 if a combustion control device is used. For a flare meeting the criteria in §63.116(a), or a boiler or process heater meeting the criteria in §63.116(b), the percent reduction shall be 98 percent. If a noncombustion control device is used, percent reduction shall be demonstrated by a performance test at the inlet and outlet of the device, or, if testing is not feasible, by a control design evaluation and documented engineering calculations.

(*2*) For determining debits from Group 1 continuous process vents, product recovery devices shall not be considered control devices and cannot be assigned a percent reduction in calculating ECPV$_{iACTUAL}$. The sampling site for measurement of uncontrolled emissions is after the final product recovery device. However, as provided in §63.113(a)(3), a Group 1 continuous process vent may add sufficient product recovery to raise the TRE index value above 1.0 or, for Group 1 continuous process vents at an existing affected source producing MBS, above 3.7, thereby becoming a Group 2 continuous process vent. Such a continuous process vent would not be a Group 1 continuous process vent and would, therefore, not be included in determining debits under this paragraph (g)(2)(iii)(B)(*2*).

(*3*) Procedures for calculating the percent reduction of pollution prevention measures are specified in paragraph (j) of this section.

(3) Emissions from continuous process vents located in the collection of process sections within the affected source subject to §63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) shall be calculated as follows:

(i) The total organic HAP emissions from continuous process vents located in the collection of process sections j within the affected source, ECPVS$_{jACTUAL}$, shall be calculated as follows. The procedures in paragraph (g)(2)(iii) of this section shall be used to determine the organic HAP emissions for each individual continuous process vent, except that paragraph (g)(2)(iii)(B)(*2*) of this section shall not apply and the sampling site shall be

after those recovery devices installed as part of normal operation; before any add-on control devices (i.e., those required by regulation); and prior to discharge to the atmosphere. Then, individual continuous process vent emissions shall be summed to determine $ECPVS_{jACTUAL}$.

(ii)(A) $ECPVSjstd$ shall be calculated using Equation 31 of this subpart.

$$ECPVS_{jstd} = (EF_{std})(PP_j) \qquad [Eq. 31]$$

where:

$ECPVS_{jstd}$=Emissions if the applicable standard had been applied to the uncontrolled emissions, megagrams per month.

EF_{std}=0.000018 Mg organic HAP/Mg of product, if the collection of process sections within the affected source is subject to § 63.1316(b)(1)(i).

=0.00002 Mg organic HAP/Mg of product, if the collection of process sections within the affected source is subject to § 63.1316 (b)(1)(ii) or (b)(2)(ii).

=0.00004 Mg organic HAP/Mg of product, if the collection of process sections within the affected source is subject to § 63.1316(b)(2)(i).

=0.0000036 Mg organic HAP/Mg of product, if the collection of process sections within the affected source is subject to § 63.1316(c)(1).

PP_j=Polymer produced, Mg/month, for the collection of process sections j within the affected source, as calculated according to paragraph (g)(3)(ii)(B) of this section.

(B) The amount of polymer produced, Mg per month, for the collection of process sections j within the affected source shall be determined by determining the weight of polymer pulled from the process line(s) during a 30-day period. The polymer produced shall be determined by direct measurement or by an alternate methodology, such as materials balance. If an alternate methodology is used, a description of

the methodology, including all procedures, data, and assumptions shall be submitted as part of the Emissions Averaging Plan required by § 63.1335(e)(4).

(C) Alternatively, $ECPVS_{jstd}$ for continuous process vents located in the collection of process sections within the affected source subject to § 63.1316(c)(1) may be calculated using the procedures in paragraph (g)(2)(i) and (g)(2)(ii) of this section to determine the organic HAP emissions for each individual continuous process vent, except that the sampling site shall be after recovery devices installed as part of normal operation; before any add-on control devices (i.e., those required by regulation); and prior to discharge to the atmosphere. Then, individual continuous process vent emissions shall be summed and multiplied by 0.02 to determine $ECPVS_{jstd}$.

(4) Emissions from storage vessels shall be calculated using the procedures specified in § 63.150(g)(3).

(5) Emissions from wastewater streams shall be calculated using the procedures in § 63.150(g)(5).

(6) Emissions from batch process vents shall be calculated as follows:

(i) $EBPV_{iu}$ for each batch process vent i shall be calculated using the procedures specified in § 63.1323(b).

(ii) The following procedures and equations shall be used to determine $EBPV_{iACTUAL}$:

(A) If the batch process vent is not controlled by a control device or pollution prevention measure, $EBPV_{iACTUAL}=EBPV_{iu}$, where $EBPV_{iu}$ is calculated using the procedures in § 63.1323(b).

(B) If the batch process vent is controlled using a control device or a pollution prevention measure achieving less than 90 percent reduction for the batch cycle, calculate $EBPV_{iACTUAL}$ using Equation 32 of this subpart, where percent reduction is for the batch cycle.

$$EBPV_{iACTUAL} = EBPV_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \qquad [Eq. 32]$$

(*1*) The percent reduction for the batch cycle shall be calculated according to the procedures in §63.1325(c)(2).

(*2*) The percent reduction for control devices shall be calculated according to the procedures in §63.1325 (c)(2)(i) through (c)(2)(iii).

(*3*) The percent reduction of pollution prevention measures shall be calculated using the procedures specified in paragraph (j) of this section.

(7) Emissions from aggregate batch vent streams shall be calculated as follows:

$$EABV_{iu} = \left(2.494 \times 10^{-9}\right) Qh \left(\sum_{j=1}^{n} C_j M_j\right) \quad [Eq. 33]$$

where:

$EABV_{iu}$=Uncontrolled aggregate batch vent stream emission rate from aggregate batch vent stream i, megagrams per month.

Q=Vent stream flow rate, dry standard cubic meters per minute, measured using Method 2, 2A, 2C, or 2D, 40 CFR part 60, appendix A, as appropriate.

h=Monthly hours of operation during which positive flow is present from the aggregate batch vent stream, hours per month.

C_j=Concentration, parts per million by volume, dry basis, of organic HAP j as measured by Method 18, 40 CFR part 60, appendix A.

M_j=Molecular weight of organic HAP j, gram per gram-mole.

n=Number of organic HAP in the stream.

(A) The values of Q and C_j shall be determined during a performance test conducted under representative operating conditions. The values of Q and C_j shall be established in the Notification of Compliance Status and must be updated as provided in paragraph (g)(7)(ii)(B) of this section.

(i) For purposes of determining aggregate batch vent stream flow rate, organic HAP concentrations, and temperature, the sampling site shall be before any control device and before discharge to the atmosphere. Method 1 or 1A, 40 CFR part 60, appendix A, shall be used for selection of the sampling site.

(ii) $EABV_{iu}$ for each aggregate batch vent stream i shall be calculated using Equation 33 of this subpart.

(B) If there is a change in capacity utilization other than a change in monthly operating hours, or if any other change is made to the process or product recovery equipment or operation such that the previously measured values of Q and C_j are no longer representative, a new performance test shall be conducted to determine new representative values of Q and C_j. These new values shall be used to calculate debits and credits from the time of the change forward, and the new values shall be reported in the next Periodic Report.

(iii) The following procedures and equations shall be used to calculate $EABV_{iACTUAL}$:

(A) If the aggregate batch vent stream is not controlled by a control device or pollution prevention measure, $EABV_{iACTUAL} = EABV_{iu}$, where $EABV_{iu}$ is calculated according to the procedures in paragraphs (g)(7)(i) and (g)(7)(ii) of this section.

(B) If the aggregate batch vent stream is controlled using a control device or a pollution prevention measure achieving less than 90 percent reduction, calculate $EABV_{iACTUAL}$ using Equation 34 of this subpart.

$$\text{EABV}_{\text{iACTUAL}} = \text{EABV}_{\text{iu}}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad \left[\text{Eq. 34}\right]$$

(*1*) The percent reduction for control devices shall be determined according to the procedures in §63.1325(e).

(*2*) The percent reduction for pollution prevention measures shall be calculated according to the procedures specified in paragraph (j) of this section.

(h) Credits are generated by the difference between emissions that are allowed for each Group 1 and Group 2 emission point and the actual emissions from that Group 1 or Group 2 emission point that has been controlled after November 15, 1990 to a level more stringent than what is required by this subpart or any other State or Federal rule or statute. Said Group 1 and Group 2 emission points are identified in paragraphs (c)(1) through (c)(5) of this section. Credits shall be calculated using Equation 35 of this subpart.

(1) Sourcewide credits shall be calculated using Equation 35 of this subpart.

$$Credits = D\sum_{i=1}^{n}\left((0.02)ECPV1_{iu} - ECPV1_{iACTUAL}\right)$$

$$+D\sum_{j=1}^{n}\left(ECPVS1_{jSTD} - ECPVS1_{jACTUAL}\right)$$

$$+D\sum_{i=1}^{m}\left(ECPV2_{iBASE} - ECPV2_{iACTUAL}\right)$$

$$+D\sum_{j=1}^{m}\left(ECPVS2_{jBASE} - ECPVS2_{jACTUAL}\right)$$

$$+D\sum_{i=1}^{n}\left((BL)ES1_{iu} - ES1_{iACTUAL}\right) + D\sum_{i=1}^{m}\left(ES2_{iBASE} - ES2_{iACTUAL}\right)$$

$$+D\sum_{i=1}^{n}\left(EWW1_{ic} - EWW1_{iACTUAL}\right) \qquad\qquad [Eq.\,35]$$

$$+D\sum_{i=1}^{m}\left(EWW2_{iBASE} - EWW2_{iACTUAL}\right)$$

$$+D\sum_{i=1}^{n}\left((0.10)EBPV1_{iu} - EBPV1_{iACTUAL}\right)$$

$$+D\sum_{i=1}^{n}\left((0.10)EABV1_{iu} - EABV1_{iACTUAL}\right)$$

$$+D\sum_{i=1}^{m}\left(EBPV2_{iBASE} - EBPV2_{iACTUAL}\right)$$

$$+D\sum_{i=1}^{m}\left(EABV2_{iBASE} - EABV2_{iACTUAL}\right)$$

Credits and all terms of Equation 35 of this subpart are in units of megagrams per month, the baseline date is November 15, 1990.

where:

D=Discount factor=0.9 for all credit generating emission points except those controlled by a pollution prevention measure; discount factor=1.0 for each credit generating emission point controlled by a pollution prevention measure (i.e., no discount provided).

$ECPV1_{iACTUAL}$=Emissions for each Group 1 continuous process vent i subject to §63.1315 that is controlled to a level more stringent than the reference control technology. $ECPV1_{iACTUAL}$ is calculated according to paragraph (h)(2) of this section.

(0.02)ECPV1$_{iu}$=Emissions from each Group 1 continuous process vent i subject to §63.1315 if the applicable reference control technology had been applied to the uncontrolled emissions. ECPV1$_{iu}$ is calculated according to paragraph (h)(2) of this section.

ECPVS1$_{jSTD}$=Emissions from Group 1 continuous process vents subject to §63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source if the applicable standard had been applied to the uncontrolled emissions. ECPVS1$_{jSTD}$ is calculated according to paragraph (h)(3) of this section.

ECPVS1$_{jACTUAL}$=Emissions from Group 1 continuous process vents subject to §63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source that are controlled to a level more stringent than the applicable standard. ECPVS1$_{jACTUAL}$ is calculated according to paragraph (h)(3) of this section.

ECPV2$_{iACTUAL}$=Emissions from each Group 2 continuous process vent i subject to §63.1315 that is controlled. ECPV2$_{iACTUAL}$ is calculated according to paragraph (h)(2) of this section.

ECPV2$_{iBASE}$=Emissions from each Group 2 continuous process vent i subject to §63.1315 at the baseline date. ECPV2$_{iBASE}$ is calculated according to paragraph (h)(2) of this section.

ECPVS2$_{jBASE}$=Emissions from Group 2 continuous process vents subject to §63.1316(b)(1)(i) located in the collection of material recovery sections j within the affected source at the baseline date. ECPVS2$_{jBASE}$ is calculated according to paragraph (h)(3) of this section.

ECPVS2$_{jACTUAL}$=Emissions from Group 2 continuous process vents subject to §63.1316(b)(1)(i) located in the collection of material recovery sections j within the affected source that are controlled. ECPVS2$_{jACTUAL}$ is calculated according to paragraph (h)(3) of this section.

ES1$_{iACTUAL}$=Emissions from each Group 1 storage vessel i that is controlled to a level more stringent than the applicable reference control technology or standard. ES1$_{iACTUAL}$ is calculated according to paragraph (h)(4) of this section.

(BL)ES1$_{iu}$=Emissions from each Group 1 storage vessel i if the applicable reference control technology or standard had been applied to the uncontrolled emissions. ES1$_{iu}$ is calculated according to paragraph (h)(4) of this section. For calculating these emissions, BL=0.05 for each Group 1 storage vessel i subject to §63.1314(a); and BL=0.02 for each storage vessel i subject to §63.1314(c).

ES2$_{iACTUAL}$=Emissions from each Group 2 storage vessel i that is controlled. ES2$_{iACTUAL}$ is calculated according to paragraph (h)(4) of this section.

ES2$_{iBASE}$=Emissions from each Group 2 storage vessel i at the baseline date. ES2$_{iBASE}$ is calculated according to paragraph (h)(4) of this section.

EWW1$_{iACTUAL}$=Emissions from each Group 1 wastewater stream i that is controlled to a level more stringent than the reference control technology. EWW1$_{iACTUAL}$ is calculated according to paragraph (h)(5) of this section.

EWW1$_{ic}$=Emissions from each Group 1 wastewater stream i if the reference control technology had been applied to the uncontrolled emissions. EWW1$_{ic}$ is calculated according to paragraph (h)(5) of this section.

EWW2$_{iACTUAL}$=Emissions from each Group 2 wastewater stream i that is controlled. EWW2$_{iACTUAL}$ is calculated according to paragraph (h)(5) of this section.

EWW2$_{iBASE}$=Emissions from each Group 2 wastewater stream i at the baseline date. EWW2$_{iBASE}$ is calculated according to paragraph (h)(5) of this section.

(0.10)EBPV1$_{iu}$=Emissions from each Group 1 batch process vent i if the applicable reference control technology had been applied to the uncontrolled emissions. EBPV1$_{iu}$ is calculated according to paragraph (h)(6) of this section.

EBPV1$_{iACTUAL}$=Emissions from each Group 1 batch process vent i that is

controlled to a level more stringent than the reference control technology. $EBPV1_{iACTUAL}$ is calculated according to paragraph (h)(6) of this section.

(0.10)$EABV1_{iu}$=Emissions from each Group 1 aggregate batch vent stream i if the applicable reference control technology had been applied to the uncontrolled emissions. $EABV1_{iu}$ is calculated according to paragraph (h)(7) of this section.

$EABV1_{iACTUAL}$=Emissions from each Group 1 aggregate batch vent stream i that is controlled to a level more stringent than the reference control technology. $EABV1_{iACTUAL}$ is calculated according to paragraph (h)(7) of this section.

$EBPV2_{iBASE}$=Emissions from each Group 2 batch process vent i at the baseline date. $EBPV2_{iBASE}$ is calculated according to paragraph (h)(6) of this section.

$EBPV2_{iACTUAL}$=Emissions from each Group 2 batch process vent i that is controlled. $EBPV2_{iACTUAL}$ is calculated according to paragraph (h)(6) of this section.

$EABV2_{iBASE}$=Emissions from each Group 2 aggregate batch vent stream i at the baseline date. $EABV2_{iBASE}$ is calculated according to paragraph (h)(7) of this section.

$EABV2_{iACTUAL}$=Emissions from each Group 2 aggregate batch vent stream i that is controlled. $EABV2_{iACTUAL}$ is calculated according to paragraph (h)(7) of this section.

n=Number of Group 1 emission points included in the emissions average. The value of n is not necessarily the same for continuous process vents, batch process vents, aggregate batch vent streams, storage vessels, wastewater streams, or the collection of process sections within the affected source.

m=Number of Group 2 emission points included in the emissions average. The value of m is not necessarily the same for continuous process vents, batch process vents, aggregate batch vent streams, storage vessels, wastewater streams, or the collection of process sections within the affected source.

(i) Except as specified in paragraph (h)(1)(iv) of this section, for an emission point controlled using a reference control technology, the percent reduction for calculating credits shall be no greater than the nominal efficiency associated with the reference control technology, unless a higher nominal efficiency is assigned as specified in paragraph (h)(1)(ii) of this section.

(ii) For an emission point controlled to a level more stringent than the reference control technology, the nominal efficiency for calculating credits shall be assigned as described in paragraph (i) of this section. A reference control technology may be approved for use in a different manner and assigned a higher nominal efficiency according to the procedures in paragraph (i) of this section.

(iii) For an emission point controlled using a pollution prevention measure, the nominal efficiency for calculating credits shall be as determined as described in paragraph (j) of this section.

(iv) For Group 1 and Group 2 batch process vents and Group 1 and Group 2 aggregate batch vent streams, the percent reduction for calculating credits shall be the percent reduction determined according to the procedures in paragraphs (h)(6)(ii) and (h)(6)(iii) of this section for batch process vents and paragraphs (h)(7)(ii) and (h)(7)(iii) of this section for aggregate batch vent streams.

(2) Emissions from continuous process vents subject to §63.1315 shall be determined as follows:

(i) Uncontrolled emissions from Group 1 continuous process vents ($ECPV1_{iu}$) shall be calculated according to the procedures and equation for $ECPV_{iu}$ in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(ii) Actual emissions from Group 1 continuous process vents controlled using a technology with an approved nominal efficiency greater than 98 percent or a pollution prevention measure achieving greater than 98 percent emission reduction ($ECPV1_{iACTUAL}$) shall be calculated using Equation 36 of this subpart.

$$ECPV1_{iACTUAL} = ECPV1_{iu}\left(1 - \frac{\text{Nominal efficiency \%}}{100\%}\right) \quad [\text{Eq. 36}]$$

(iii) The following procedures shall be used to calculate actual emissions from Group 2 continuous process vents ($ECPV2_{iACTUAL}$):

(A) For a Group 2 continuous process vent controlled by a control device, a recovery device applied as a pollution prevention project, or a pollution prevention measure, where the control achieves a percent reduction less than or equal to 98 percent reduction, use Equation 37 of this subpart.

$$ECPV2_{iACTUAL} = ECPV2_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. 37}]$$

(*1*) $ECPV2_{iu}$ shall be calculated according to the equations and procedures for $ECPV_{iu}$ in paragraphs (g)(2)(i) and (g)(2)(ii) of this section, except as provided in paragraph (h)(2)(iii)(A)(*3*) of this section.

(*2*) The percent reduction shall be calculated according to the procedures in paragraphs (g)(2)(iii)(B)(*1*) through (g)(2)(iii)(B)(*3*) of this section, except as provided in paragraph (h)(2)(iii)(A)(*4*) of this section.

(*3*) If a recovery device was added as part of a pollution prevention project, $ECPV2_{iu}$ shall be calculated prior to that recovery device. The equation for $ECPV_{iu}$ in paragraph (g)(2)(ii) of this section shall be used to calculate $ECPV2_{iu}$; however, the sampling site for measurement of vent stream flow rate and organic HAP concentration shall be at the inlet of the recovery device.

(*4*) If a recovery device was added as part of a pollution prevention project, the percent reduction shall be demonstrated by conducting a performance test at the inlet and outlet of that recovery device.

(B) For a Group 2 continuous process vent controlled using a technology with an approved nominal efficiency greater than 98 percent or a pollution prevention measure achieving greater than 98 percent reduction, use Equation 38 of this subpart.

$$ECPV2_{iACTUAL} = ECPV2_{iu}\left(1 - \frac{\text{Nominal efficiency \%}}{100\%}\right) \quad [\text{Eq. 38}]$$

(iv) Emissions from Group 2 continuous process vents at baseline shall be calculated as follows:

(A) If the continuous process vent was uncontrolled on November 15, 1990, $ECPV2_{iBASE}=ECPV2_{iu}$ and shall be calculated according to the procedures and equation for $ECPV_{iu}$ in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(B) If the continuous process vent was controlled on November 15, 1990, use Equation 39 of this subpart.

$$ECPV2_{iBASE} = ECPV2_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. 39}]$$

(*1*) ECPV2$_{iu}$ is calculated according to the procedures and equation for ECPV$_{iu}$ in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(*2*) The percent reduction shall be calculated according to the procedures specified in paragraphs (g)(2)(iii)(B)(*1*) through (g)(2)(iii)(B)(*3*) of this section.

(C) If a recovery device was added as part of a pollution prevention project initiated after November 15, 1990, ECPV2$_{iBASE}$=ECPV2$_{iu}$, where ECPV2$_{iu}$ is calculated according to paragraph (h)(2)(iii)(A)(*3*) of this section.

(3) Emissions from continuous process vents subject to §63.1316(b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) shall be determined as follows:

(i) Emissions from Group 1 continuous process vents located in the collection of process sections j within the affected source if the applicable standard had been applied to the uncontrolled emissions (ECPVS1$_{jstd}$) shall be calculated according to paragraph (g)(3)(ii) of this section.

(ii) Actual emissions from Group 1 continuous process vents located in the collection of process sections j within the affected source controlled to a level more stringent than the applicable standard (ECPVS1$_{jACTUAL}$) shall be calculated using the procedures in paragraphs (g)(3)(ii)(A) and (g)(3)(ii)(B) of this section, except that the actual emission level, Mg organic HAP/Mg of product, shall be used as EF$_{std}$ in Equation 31 of this subpart. Further, ECPVS1$_{jACTUAL}$ for continuous process vents subject to §63.1316(c)(1) controlled in accordance with §63.1316(c)(1)(iii) shall be calculated using the procedures in paragraph (h)(2)(ii) of this section for individual continuous process vents and then summing said emissions to get ECPVS1$_{jACTUAL}$, except that the sampling site shall be after recovery devices installed as part of normal operation; before any add-on control devices (i.e., those required by regulation); and prior to discharge to the atmosphere.

(iii) Actual emissions from Group 2 continuous process vents subject to §63.1316(b)(1)(i) located in the collection of material recovery sections j within the affected source (ECPVS2$_{jACTUAL}$) shall be calculated using the procedures in paragraphs (g)(3)(ii)(A) and (g)(3)(ii)(B) of this section, except that the actual emission level, Mg organic HAP/Mg of product, shall be used as EF$_{std}$ in Equation 31 of this subpart.

(iv) Emissions from Group 2 continuous process vents subject to §63.1316(b)(1)(i) located in the collection of material recovery sections j within the affected source at baseline (ECPVS2$_{jBASE}$) shall be calculated using the procedures in paragraphs (g)(3)(ii)(A) and (g)(3)(ii)(B) of this section, except that the actual emission level, Mg organic HAP/Mg of product, at baseline shall be used as EF$_{std}$ in Equation 31 of this subpart.

(4)(i) Emissions from storage vessels shall be calculated using the procedures specified in §63.150(h)(3).

(ii) Actual emissions from Group 1 storage vessels at an existing affected source producing ASA/AMSAN subject to §63.1314(c) using a technology with an approved nominal efficiency greater than 98 percent or a pollution prevention measure achieving greater than 98 percent emission reduction shall be calculated using the procedures specified in §63.150(h)(3)(ii).

(5) Emissions from wastewater streams shall be calculated using the procedures specified in §63.150(h)(5).

(6) Emissions from batch process vents shall be determined as follows:

(i) Uncontrolled emissions from Group 1 batch process vents (EBPV1$_{iu}$) shall be calculated using the procedures §63.1323(b).

(ii) Actual emissions from Group 1 batch process vents controlled to a level more stringent than the reference control technology (EBPV1$_{iACTUAL}$) shall be calculated using Equation 40 of this subpart, where percent reduction is for the batch cycle.

$$EBPV1_{iACTUAL} = EBPV1_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. 40}]$$

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(A) The percent reduction for the batch cycle shall be calculated according to the procedures in §63.1325(c)(2).

(B) The percent reduction for control devices shall be determined according to the procedures in §63.1325(c)(2)(i) through (c)(2)(iii).

(C) The percent reduction of pollution prevention measures shall be calculated using the procedures specified in paragraph (j) of this section.

(iii) Actual emissions from Group 2 batch process vents ($EBPV2_{iACTUAL}$) shall be calculated using Equation 41 of this subpart and the procedures in paragraphs (h)(6)(ii)(A) through (h)(6)(ii)(C) of this section. $EBPV2_{iu}$ shall be calculated using the procedures specified in §63.1323(b).

$$EBPV2_{iACTUAL} = EBPV2_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. } 41]$$

(iv) Emissions from Group 2 batch process vents at baseline ($EBPV2_{iBASE}$) shall be calculated as follows:

(A) If the batch process vent was uncontrolled on November 15, 1990, $EBPV2_{iBASE}=EBPV2_{iu}$ and shall be calculated using the procedures specified in §63.1323(b).

(B) If the batch process vent was controlled on November 15, 1990, use Equation 42 of this subpart and the procedures in paragraphs (h)(6)(ii)(A) through (h)(6)(ii)(C) of this section. $EBPV2_{iu}$ shall be calculated using the procedures specified in §63.1323(b).

$$EBPV2_{iBASE} = EBPV2_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. } 42]$$

(7) Emissions from aggregate batch vent streams shall be determined as follows:

(i) Uncontrolled emissions from Group 1 aggregate batch vent streams ($EABV1_{iu}$) shall be calculated according to the procedures and equation for

$EABV_{iu}$ in paragraphs (g)(7)(i) and (g)(7)(ii) of this section.

(ii) Actual emissions from Group 1 aggregate batch vent streams controlled to a level more stringent than the reference control technology ($EABV1_{iACTUAL}$) shall be calculated using Equation 43 of this subpart.

$$EABV1_{iACTUAL} = EABV1_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. } 43]$$

(A) The percent reduction for control devices shall be determined according to the procedures in §63.1325(e).

(B) The percent reduction of pollution prevention measures shall be calculated using the procedures specified in paragraph (j) of this section.

(iii) Actual emissions from Group 2 aggregate batch vent streams

($EABV2_{iACTUAL}$) shall be calculated using Equation 44 of this subpart and the procedures in paragraphs (h)(7)(ii)(A) through (h)(7)(ii)(B) of this section. $EABV2_{iu}$ shall be calculated according to the equations and procedures for $EABV_{iu}$ in paragraphs (g)(7)(i) and (g)(7)(ii) of this section.

$$EABV2_{iACTUAL} = EABV2_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. 44}]$$

(iv) Emissions from Group 2 aggregate batch vent streams at baseline shall be calculated as follows:

(A) If the aggregate batch vent stream was uncontrolled on November 15, 1990, $EABV2_{iBASE}=EABV2_{iu}$ and shall be calculated according to the procedures and equation for $EABV_{iu}$ in paragraphs (g)(7)(i) and (g)(7)(ii) of this section.

(B) If the aggregate batch vent stream was controlled on November 15, 1990, use Equation 45 of this subpart and the procedures in paragraphs (h)(7)(ii)(A) through (h)(7)(ii)(B) of this section. $EABV2_{iu}$ shall be calculated according to the equations and procedures for $EABV_{iu}$ in paragraphs (g)(7)(i) and (g)(7)(ii) of this section.

$$EABV2_{iBASE} = EABV2_{iu}\left(1 - \frac{\text{Percent reduction}}{100\%}\right) \quad [\text{Eq. 45}]$$

(i) The following procedures shall be followed to establish nominal efficiencies for emission controls for storage vessels, continuous process vents, and process wastewater streams. The procedures in paragraphs (i)(1) through (i)(6) of this section shall be followed for control technologies that are different in use or design from the reference control technologies and achieve greater percent reductions than the percent efficiencies assigned to the reference control technologies in §63.111.

(1) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from the reference control technology, and the different control technology will be used in more than three applications at a single plant-site, the owner or operator shall submit the information specified in paragraphs (i)(1)(i) through (i)(1)(iv) of this section to the Director of the EPA Office of Air Quality Planning and Standards in writing:

(i) Emission stream characteristics of each emission point to which the control technology is or will be applied including the kind of emission point, flow, organic HAP concentration, and all other stream characteristics necessary to design the control technology or determine its performance.

(ii) Description of the control technology including design specifications.

(iii) Documentation demonstrating to the Administrator's satisfaction the control efficiency of the control technology. This may include performance test data collected using an appropriate EPA Method or any other method validated according to Method 301 of appendix A of this part. If it is infeasible to obtain test data, documentation may include a design evaluation and calculations. The engineering basis of the calculation procedures and all inputs and assumptions made in the calculations shall be documented.

(iv) A description of the parameter or parameters to be monitored to ensure that the control technology will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) The Administrator shall determine within 120 operating days whether an application presents sufficient information to determine nominal efficiency. The Administrator reserves the right to request specific data in addition to the items listed in paragraph (i)(1) of this section.

(3) The Administrator shall determine within 120 operating days of the submittal of sufficient data whether a

control technology shall have a nominal efficiency and the level of that nominal efficiency. If, in the Administrator's judgment, the control technology achieves a level of emission reduction greater than the reference control technology for a particular kind of emission point, the Administrator will publish a FEDERAL REGISTER notice establishing a nominal efficiency for the control technology.

(4) The Administrator may grant permission to take emission credits for use of the control technology. The Administrator may also impose requirements that may be necessary to ensure operation and maintenance to achieve the specified nominal efficiency.

(5) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from the reference control technology and the different control technology will be used in no more than three applications at a single plant site, the information listed in paragraphs (i)(1)(i) through (i)(1)(iv) of this section can be submitted to the permitting authority for the affected source for approval instead of the Administrator.

(i) In these instances, use and conditions for use of the control technology can be approved by the permitting authority as part of an operating permit application or modification. The permitting authority shall follow the procedures specified in paragraphs (i)(2) through (i)(4) of this section except that, in these instances, a FEDERAL REGISTER notice is not required to establish the nominal efficiency for the different technology.

(ii) If, in reviewing the application, the permitting authority believes the control technology has broad applicability for use by other affected sources, the permitting authority shall submit the information provided in the application to the Director of the EPA Office of Air Quality Planning and Standards. The Administrator shall review the technology for broad applicability and may publish a FEDERAL REGISTER notice; however, this review shall not affect the permitting authority's approval of the nominal efficiency of the control technology for the specific application.

(6) If, in reviewing an application for a control technology for an emission point, the Administrator or permitting authority determines the control technology is not different in use or design from the reference control technology, the Administrator or permitting authority shall deny the application.

(j) The following procedures shall be used for calculating the efficiency (percent reduction) of pollution prevention measures for storage vessels, continuous process vents, batch process vents, aggregate batch vent streams, and wastewater streams:

(1) A pollution prevention measure is any practice that meets the criteria of paragraphs (j)(1)(i) and (j)(1)(ii) of this section.

(i) A pollution prevention measure is any practice that results in a lesser quantity of organic HAP emissions per unit of product released to the atmosphere prior to out-of-process recycling, treatment, or control of emissions, while the same product is produced.

(ii) Pollution prevention measures may include: substitution of feedstocks that reduce organic HAP emissions; alterations to the production process to reduce the volume of materials released to the environment; equipment modifications; housekeeping measures; and in-process recycling that returns waste materials directly to production as raw materials. Production cutbacks do not qualify as pollution prevention.

(2) The emission reduction efficiency of pollution prevention measures implemented after November 15, 1990, can be used in calculating the actual emissions from an emission point in the debit and credit equations in paragraphs (g) and (h) of this section.

(i) For pollution prevention measures, the percent reduction used in the equations in paragraphs (g)(2) through (g)(7) of this section and paragraphs (h)(2) through (h)(7) of this section is the percent difference between the monthly organic HAP emissions for each emission point after the pollution prevention measure for the most recent month versus monthly emissions from the same emission point before the pollution prevention measure, adjusted by the volume of product produced during the two monthly periods.

(ii) Equation 46 of this subpart shall be used to calculate the percent reduction of a pollution prevention measure for each emission point.

$$\text{Percent reduction} = \frac{E_B - \dfrac{\left(E_{pp}\right)\left(P_B\right)}{P_{pp}}}{E_B} 100\% \qquad [\text{Eq. 46}]$$

where:

Percent reduction=Efficiency of pollution prevention measure (percent organic HAP reduction).

E_B=Monthly emissions before the pollution prevention measure, megagrams per month, determined as specified in paragraphs (j)(2)(ii)(A), (j)(2)(ii)(B), and (j)(2)(ii)(C) of this section.

E_{pp}=Monthly emissions after the pollution prevention measure, megagrams per month, as determined for the most recent month, determined as specified in either paragraphs (j)(2)(ii)(D) or (j)(2)(ii)(E) of this section.

P_B=Monthly production before the pollution prevention measure, megagrams per month, during the same period over which E_B is calculated.

P_{PP}=Monthly production after the pollution prevention measure, megagrams per month, as determined for the most recent month.

(A) The monthly emissions before the pollution prevention measure, E_B, shall be determined in a manner consistent with the equations and procedures in paragraphs (g)(2) and (g)(3) of this section for continuous process vents, paragraph (g)(4) of this section for storage vessels, paragraph (g)(6) of this section for batch process vents, and paragraph (g)(7) of this section for aggregate batch vent streams.

(B) For wastewater, E_B shall be calculated using Equation 47 of this subpart.

$$E_B = \sum_{i=1}^{n}\left[\left(6.0*10^{-8}\right)Q_{Bi}\ H_{Bi}\sum_{m=1}^{s}Fe_m\ HAP_{Bim}\right] \qquad [\text{Eq. 47}]$$

where:

n=Number of wastewater streams.

Q_{Bi}=Average flow rate for wastewater stream i before the pollution prevention measure, defined and determined according to §63.144(c)(3), liters per minute, before implementation of the pollution prevention measure.

H_{Bi}=Number of hours per month that wastewater stream i was discharged before the pollution prevention measure, hours per month.

s=Total number of organic HAP in wastewater stream i.

Fe_m=Fraction emitted of organic HAP m in wastewater from Table 9 of subpart G of this part, dimensionless.

HAP_{Bim}=Average concentration of organic HAP m in wastewater stream i, defined and determined according to paragraph (g)(5)(i) of this section, before the pollution prevention measure, parts per million by weight, as measured before the implementation of the pollution prevention measure.

(C) If the pollution prevention measure was implemented prior to September 12, 1996 records may be used to determine E_B.

(D) The monthly emissions after the pollution prevention measure, E_{pp}, may

be determined during a performance test or by a design evaluation and documented engineering calculations. Once an emissions-to-production ratio has been established, the ratio can be used to estimate monthly emissions from monthly production records.

(E) For wastewater, E_{pp} shall be calculated using Equation 48 of this subpart and n, Q_{ppi}, H_{ppi}, s, Fe_m, and HAP_{ppim} are defined and determined as described in paragraph (j)(2)(ii)(B) of this section, except that Q_{ppi}, H_{ppi}, and HAP_{ppim} shall be determined after the pollution prevention measure has been implemented.

$$E_{pp} = \sum_{i=1}^{n}\left[\left(6.0*10^{-8}\right)Q_{ppi}\ H_{ppi}\sum_{m=1}^{s}Fe_m\ HAP_{ppim}\right] \qquad [Eq.\ 48]$$

(iii) All equations, calculations, test procedures, test results, and other information used to determine the percent reduction achieved by a pollution prevention measure for each emission point shall be fully documented.

(iv) The same pollution prevention measure may reduce emissions from multiple emission points. In such cases, the percent reduction in emissions for each emission point must be calculated.

(v) For the purposes of the equations in paragraphs (h)(2) through (h)(7) of this section used to calculate credits for emission points controlled more stringently than the reference control technology, the nominal efficiency of a pollution prevention measure is equivalent to the percent reduction of the pollution prevention measure. When a pollution prevention measure is used, the owner or operator of an affected source is not required to apply to the Administrator for a nominal efficiency and is not subject to paragraph (i) of this section.

(k) The owner or operator must demonstrate that the emissions from the emission points proposed to be included in the emissions average will not result in greater hazard or, at the option of the Administrator, greater risk to human health or the environment than if the emission points were controlled according to the provisions in §§ 63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330.

(1) This demonstration of hazard or risk equivalency shall be made to the satisfaction of the Administrator.

(i) The Administrator may require owners and operators to use specific methodologies and procedures for making a hazard or risk determination.

(ii) The demonstration and approval of hazard or risk equivalency shall be made according to any guidance that the Administrator makes available for use.

(2) Owners and operators shall provide documentation demonstrating the hazard or risk equivalency of their proposed emissions average in their operating permit application or in their Emissions Averaging Plan if an operating permit application has not yet been submitted.

(3) An Emissions Averaging Plan that does not demonstrate hazard or risk equivalency to the satisfaction of the Administrator shall not be approved. The Administrator may require such adjustments to the Emissions Averaging Plan as are necessary in order to ensure that the emissions average will not result in greater hazard or risk to human health or the environment than would result if the emission points were controlled according to §§ 63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330.

(4) A hazard or risk equivalency demonstration must:

(i) Be a quantitative, bona fide chemical hazard or risk assessment;

(ii) Account for differences in chemical hazard or risk to human health or the environment; and

(iii) Meet any requirements set by the Administrator for such demonstrations.

(l) For periods of parameter monitoring excursions, an owner or operator may request that the provisions of paragraphs (l)(1) through (l)(4) of this section be followed instead of the procedures in paragraphs (f)(3)(i) and (f)(3)(ii) of this section.

(1) The owner or operator shall notify the Administrator of monitoring excursions in the Periodic Reports as required in §63.1335(e)(6).

(2) The owner or operator shall demonstrate that other types of monitoring data or engineering calculations are appropriate to establish that the control device for the emission point was operating in such a fashion to warrant assigning full or partial credits and debits. This demonstration shall be made to the Administrator's satisfaction, and the Administrator may establish procedures of demonstrating compliance that are acceptable.

(3) The owner or operator shall provide documentation of the excursion and the other type of monitoring data or engineering calculations to be used to demonstrate that the control device for the emission point was operating in such a fashion to warrant assigning full or partial credits and debits.

(4) The Administrator may assign full or partial credit and debits upon review of the information provided.

(m) For each emission point included in an emissions average, the owner or operator shall perform testing, monitoring, recordkeeping, and reporting equivalent to that required for Group 1 emission points complying with §§63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330, as applicable. The specific requirements for continuous process vents, batch process vents, aggregate batch vent streams, storage vessels, and wastewater operations that are included in an emissions average for an affected source are identified in paragraphs (m)(1) through (m)(7) of this section.

(1) For each continuous process vent subject to §63.1315 equipped with a flare, incinerator, boiler, or process heater, as appropriate to the control technique:

(i) Determine whether the continuous process vent is Group 1 or Group 2 according to the procedures specified in §63.1315;

(ii) Conduct initial performance tests to determine percent reduction according to the procedures specified in §63.1315; and

(iii) Monitor the operating parameters, keep records, and submit reports according to the procedures specified in §63.1315.

(2) For each continuous process vent subject to §63.1315 equipped with a carbon adsorber, absorber, or condenser but not equipped with a control device, as appropriate to the control technique:

(i) Determine the flow rate, organic HAP concentration, and TRE index value according to the procedures specified in §63.1315; and

(ii) Monitor the operating parameters, keep records, and submit reports according to the procedures specified in §63.1315.

(3) For continuous process vents subject to §63.1316(b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1):

(i) Determine whether the emissions from the continuous process vents subject to §63.1316(b)(1)(i) located in the collection of material recovery sections within the affected source are greater than, equal to, or less than 0.12 kg organic HAP per Mg of product according to the procedures specified in §63.1318(b);

(ii) Determine the emission rate, ER_{HAP}, for each collection of process sections within the affected source according to the procedures specified in §63.1318(b); and

(iii) [Reserved]

(iv) Monitor the operating parameters, keep records, and submit reports according to the procedures specified in §63.1317, §63.1319, §63.1320.

(4) For each storage vessel controlled with an internal floating roof, external roof, or a closed vent system with a control device, as appropriate to the control technique:

(i) Perform the monitoring or inspection procedures according to the procedures specified in §63.1314;

(ii) Perform the reporting and recordkeeping procedures according to the procedures specified in §63.1314; and

(iii) For closed vent systems with control devices, conduct an initial design evaluation and submit an operating plan according to the procedures specified in § 63.1314.

(5) For wastewater emission points, as appropriate to the control technique:

(i) For wastewater treatment processes, conduct tests according to the procedures specified in § 63.1330;

(ii) Conduct inspections and monitoring according to the procedures specified in § 63.1330;

(iii) Implement a recordkeeping program according to the procedures specified in § 63.1330; and

(iv) Implement a reporting program according to the procedures specified in § 63.1330.

(6) For each batch process vent and aggregate batch vent stream equipped with a control device, as appropriate to the control technique:

(i) Determine whether the batch process vent or aggregate batch vent stream is Group 1 or Group 2 according to the procedures in § 63.1323;

(ii) Conduct performance tests according to the procedures specified in § 63.1325;

(iii) Conduct monitoring according to the procedures specified in § 63.1324; and

(iv) Perform the recordkeeping and reporting procedures according to the procedures specified in §§ 63.1326 and 63.1327.

(7) If an emission point in an emissions average is controlled using a pollution prevention measure or a device or technique for which no monitoring parameters or inspection procedures are required by §§ 63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, or 63.1330, the owner or operator shall submit the information specified in § 63.1335(f) for alternate monitoring parameters or inspection procedures in the Emissions Averaging Plan or operating permit application.

(n) Records of all information required to calculate emission debits and credits shall be retained for 5 years.

(o) Precompliance Reports, Emission Averaging Plans, Notifications of Compliance Status, Periodic Reports, and other reports shall be submitted as required by § 63.1335.

§ 63.1333 Additional test methods and procedures.

(a) Performance testing shall be conducted in accordance with § 63.7(a)(3), (d), (e), (g), and (h), with the exceptions specified in paragraphs (a)(1) through (a)(4) of this section and the additions specified in paragraphs (b) through (d) of this section. Sections 63.1314 through 63.1330 also contain specific testing requirements.

(1) Performance tests shall be conducted according to the provisions of § 63.7(e), except that performance tests shall be conducted at maximum representative operating conditions for the process.

(2) References in § 63.7(g) to the Notification of Compliance Status requirements in § 63.7(h) shall refer to the requirements in § 63.1335(e)(5).

(3) Because the site-specific test plans in § 63.7(c)(3) are not required, § 63.7(h)(4)(ii) is not applicable.

(4) The owner or operator shall notify the Administrator of the intention to conduct a performance test at least 30 calendar days before the performance test is scheduled to allow the Administrator the opportunity to have an observer present during the test.

(b) Each owner or operator of an existing affected source producing MBS complying with § 63.1315(b)(2) shall determine compliance with the mass emission per mass product standard by using Equation 49 of this subpart.

$$ER_{MBS} = \frac{\sum_{i=1}^{n} E_i}{PP_M} \qquad [Eq. 49]$$

where:
ER_{MBS}=Emission rate of organic HAP or TOC from continuous process vents, kg/Mg product.
E_i=Emission rate of organic HAP or TOC from continuous process vent i as calculated using the procedures specified in § 63.116(c)(4), kg/month.
PP_M=Amount of polymer produced in one month as determined by the procedures specified in § 63.1318(b)(1)(ii), Mg/month.
n=Number of continuous process vents.